## STENGTHEN ALABAMA HOMES CONTRACTOR BID SHEET

**Contractor Company Name** 

Date

**Owner Name** 

NEEDS ETROFIT	BID ITEM	WORK DESCRIPTION	BID PRICE
YES NO	Deteriorated or Damaged Roof Framing and/or Decking Repairs	If the roof deck is damaged, there is a possibility that the wood roof framing members below the damaged decking are deteriorated or damaged as well. The guidelines listed below provide guidance for repairing wood roof framing members with relatively minor damage/deterioration as described. If the damage is greater than the conditions listed, consult a licensed professional engineer to provide engineering details to repair the damage.	Total Cost
r		*See Pages 10-12 of the FFH Engineering Guide	
YES NO	Renail Roof Decking To Strengthen Deck Attachment (roof being replaced)	Renail the roof decking using 8d Ring Shank Nails min length of 2-3/8 inch nails no greatert han 6 inches o.c. (for plywood/OSB roof decking 7/16 to 5/8 inch thick)  *See page 9 of the FFH Engineering Guide	Total Cost
YES NO	Renail Roof Decking To Strengthen Deck Attachment (roof being replaced)	Renail the roof decking using 10d Ring Shank Nails min length of 2-3/4 inch 2 nails per board (for dimensional lumber or tongue and groove decks 3/4 to 1 inch thick)  *See page 8 of the FFH Engineering Guide	Total Cost
YES NO	Roof Flashing	Roof membranes shall be taped and sealed around all roof penetrations. For flashing at roof penetrations, changes in roof slope and intersections with walls or building features, follow the recommendations given in the NRCA Roofing and waterproofing manual or the FRSA guide. Lap underlayment with a minimum of a 6-inch turned up leg at all wall intersections. Lap wall weather barrier over turned up roof underlayment.  *See Page 15 of the FFH Engineering Guide	Total Cost
YES NO	Attachment of Drip Edge	Provide drip edge at eaves and gables. Overlap to be a minimum of 3 inches. Eave drip edges shall extend ½ inches below sheathing and extend back on the roof a minimum of 2 inches. Drip edge at eaves shall be permitted to be installed either over or under the underlayment. The drip edge shall be mechanically fastened to the roof deck at maximum of 4 inches o.c. Mechanical fasteners shall be applied in an alternating (staggered) pattern along the length of the drip edge with adjacent fasteners placed near opposite edges of the leg/flange of drip edge on the roof.  *See Page 15 of the FFH Engineering Guide	Total Cost
YES NO	Ridge or Off Ridge Vents	Many roofing manufacturers now make roof vents (ridge vents, static vents, turbines or powered vents) that have passed wind-driven water tests. They are identified as having passed the Florida Building Code's Testing Application Standard, TAS 100(A). All roof vents must meet the requirements of TAS 100 (A) and be installed per the manufacturer's instructions.  *See page 7 of the FFH Engineering Guide	Total Cost
YES NO	Gable Overhangs (over 12 inch Projection) and Gable end Sheathing	The prescriptive retrofit requirements are only applicable for the following gable end conditions:	Total Cost
	**Gable Overhangs must not be vented	Gable ends with outlookers:  Outlookers shall be a minimum of 2x4 framing at 24 inches o.c.  Outlookers and/or gable end wall or truss must not be notched.  Retrofit requirements continued:  Outlooker overhangs not to exceed 26 inches as shown in Figure 9 and Figure 10.  The qable end wall must be sheathed with a structural panel (minimum 7/16 inch structural wood sheathing).	
YES NO	Protecting Gable Vents from Water Penetration	*See page 19 of the FFH Engineerina Guide  Gable vents must be covered from the outside with plywood or a nonporous type of shutter that will prevent water from entering through the gable end vent. Wood structural panels with a minimum thickness of 7/16 inch and a maximum span of 4 feet is permitted as a gable end cover. Panels must be pre-cut so that they can be attached to the framing surrounding the gable vent. Panels shall be pre-drilled as required for the anchorage method and all required hardware shall be provided. Permanent corrosionresistant attachment hardware with anchors permanently installed on the building shall be provided. Attachment schedule must be, at a minimum, in accordance with Table 4. Seal the shutters to the trim boards around the edges of the gable end vent. Self-adhesive weather stripping can be used to produce the desired seal.  If installation of shutters from the outside is difficult because of the height or other considerations, but there is access through the attic, the gable vent opening can be shuttered from the inside (Figure 22). Follow the requirements for size and anchorage of wood structural panels indicated in Option 1. Note that careful attention needs to be paid to sealing around the shutter and making sure that any water that accumulates in the cavity can drain to the outside of the house and not into the wall below.  *See Page 24 of the FFH Engineering Guide	Total Cost

NEW Roof Retrofit Form 1 of 2

## STENGTHEN ALABAMA HOMES CONTRACTOR BID SHEET

NEEDS RETROFIT	BID ITEM	WORK DESCRIPTION	BID PRICE
YES NO	Provide a Sealed Roof Deck	A sealed roof deck that keeps water out of the house and stays on the roof in the event of roof covering damage shall be installed using one of the following methods when replacing the roof covering to achieve a Bronze designation:	Total Square
		<b>OPTION 1.</b> The entire roof deck shall be covered with a full layer of self-adhering polymer modified bitumen membrane meeting ASTM D1970 requirements. In some instances, the ability of the self-adhered membranes to adhere to Oriented Strand Board (OSB) sheathing may be compromised by the level of surface texture, the amount of wax added to the OSB panel, and the job site conditions. In applications where membrane adhesion to OSB is marginal, apply a primer to the OSB panels to ensure the proper attachment of the self-adhering membrane to the sheathing. Roofers are finding that shingles are bonding to many of these membranes and this could lead to damage of the sheathing when it comes time to replace the shingles. Consequently, the membrane should be covered with a bond break such as a 15-pound ASTM D226, Type I underlayment. This underlayment for the shingles only needs to be fastened sufficiently to keep it on the roof surface and provide safety to the roofers until the shingles are applied.	Total Cost
		OPTION 2: Apply a self adhering polymer modified bitumen flashing tape at least 4 inches wide directly to the roof deck to seal the horizontal and vertical joints in the roof deck. In some instances, the ability of the self-adhered membranes to adhere to Oriented Strand Board (OSB) sheathing may be compromised by the level of surface texture, the amount of wax added to the OSB panel, and the job site conditions. In applications where membrane adhesion to OSB is marginal, apply a primer to the OSB panels to ensure the proper attachment of the self-adhering tape to the sheathing. Do not nail or staple the tape to the roof sheathing. Refer to the manufacturer's recommendations for installation. Next apply a code compliant 30-pound ASTM D226, Type II underlayment over the self-adhering tape. This underlayment must be attached using annular ring or deformed shank roofing fasteners with minimum 1-inch diameter caps at 6 inches o.c. spacing along all laps and at 12 inches o.c. in the field or a more stringent fastener schedule if required by the manufacturer for high-wind installations. Horizontal laps shall be a minimum of 2 inches and end laps shall be a minimum of 6 inches. Nails with plastic or metal caps are allowed in areas where the design wind speed is less than 140 mph. Metal caps are required for areas where the design wind speed is greater than or equal to 140 mph. A self adhering polymer modified bitumen membrane complying with ASTM D1970 may be installed over this underlayment in order to comply with FEMA technical fact sheet No. 19, Option 1 which is recommended for areas with design wind speeds greater than 120 mph.  *See Page 12 thru 14 of the FFH Engineering Guide	
	Vinyl/Aluminum Soffit Retrofit (for overhangs greater than 12 inches with Vilyl or Alumium Soffits)	Properly installed vinyl and aluminum soffits should stay in place under most conditions; however it is not uncommon for vinyl and aluminum soffits to be installed in tracks that are poorly connected to the roof framing and walls. When these poorly anchored soffits blow off during a hurricane, water blows into the home.	Lineal Feet
		In the following outline of actions to be taken, the letters in parentheses refer to the letters in Figure 12 on Page 22 of the FFH Engineering Guide.	
		A. If the soffit manufacturer is not known:	Total Cost
		1. Remove the existing soffit panels (A) and label them so that they can be reinstalled in the same locations—Note: Lengths of soffits may vary around the house so it may be difficult to install some of the panels in a different location. Furthermore, it is likely that some or all of the material will need to be replaced, so make sure that it can be matched before it is removed. Any damaged soffit material should be replaced.	
		2. If required, install wood support (D). Make sure all wood supports are attached with 16d nails or ¼ inch diameter screws that have a minimum length of 2-3/4 inches (1-1/4 inch embedment) and maximum spacing of 16 inches as listed in Figure 12.	
		3. Install intermediate support (B) and/or end support (C). Note: the end support for the soffit may be provided by the sub-fascia (depending on the configuration) in lieu of installing (C) at the end of the overhang.	
		4. Attach new soffit panels (A) with fasteners to wood support members (B) and (C) as specified in Figure 12.	
		B. If the soffit manufacturer is known; refer to the manufacturer's documentation for installation details and requirements for soffit support and panel attachment for the appropriate design wind pressure and product model.	
		One source for this information is the Florida Building Code Product Approval website (http://www.floridabuilding.org/c/default.aspx), which provides information on soffit manufacturer's installation guidelines for specific design wind pressures.	
YES NO	Roof Covering Replaced with a High Wind Rated Product	Install a a qualified roof covering. Please refer to the FFH Engineering guide for acceptable roof covering products, testing, and installation requirements. Provide a minimum #30 undlerlayment or Synthetic meeting local code requirements.	Total Square
NO			